CLAIMS

1. An armature shaft comprising:

a shaft having two ends;

a commutator on said shaft;

at least one bearing on said shaft, said bearing adjacent one of said ends of said shaft, said bearing having a central bore sized to balance said shaft during rotation, said central bore having an enlarged portion; and

a retainer on said shaft for retaining said bearing on said shaft, said retainer positioned within said enlarged bore portion of said bearing.

2. The armature shaft according to Claim 1, wherein a bearing housing surrounds said bearing, said housing adapted for fixing with a motor end plate.

3. The armature shaft according to Claim 2, wherein said bearing housing having a receiving bore for receiving said bearing, said receiving bore having a stepped configuration.

4. The armature shaft according to Claim 3, wherein said bearing has an outer surface with a step configuration for seating with said bearing housing.

5. The armature shaft according to Claim 1, wherein said bearing and said retainer being flush with said shaft end.

6. The armature shaft according to Claim 1, wherein a washer separates said bearing from said commutator.

7. The armature shaft according to Claim 1, wherein said enlarged bore portion defines an abutting shoulder, said retainer abutting said shoulder.

8. An electric motor comprising:

a stator assembly;

an armature rotatable within said stator assembly;

a commutator rotatable with said armature and connected to said armature via a shaft;

brushes associated with said commutator, said brushes held in an end plate;

at least one bearing on said shaft, said bearing adjacent one of said ends of said shaft, said bearing having a central bore sized to balance said shaft during rotation, said central bore having an enlarged portion;

a retainer on said shaft for retaining said bearing on said shaft, said retainer positioned within said enlarged bore portion of said bearing; and

a bearing at the other end of said shaft.

9. The electric motor according to Claim 8, wherein a bearing housing surrounds said bearing, said housing fixed with said end plate.

10. The electric motor according to Claim 9, wherein said bearing housing having a receiving bore for receiving said bearing, said receiving bore having a stepped configuration.

11. The electric motor according to Claim 10, wherein said bearing has an outer surface with a step configuration for seating with said bearing housing.

12. The electric motor according to Claim 8, wherein said bearing and said retainer being flush with said shaft end.

13. The electric motor according to Claim 8, wherein a washer separates said bearing from said commutator.

14. The electric motor according to Claim 8, wherein said enlarged bore portion defines an abutting shoulder, said retainer abutting said shoulder.

15. A power tool comprising:

a housing;

a stator assembly;

an armature rotatable within said stator assembly;

a commutator rotatable with said armature and connected to said armature via a shaft;

brushes associated with said commutator, said brushes held in an end plate;

at least one bearing on said shaft, said bearing adjacent one of said ends of said shaft, said bearing having a central bore sized to balance said shaft during rotation, said central bore having an enlarged portion;

a retainer on said shaft for retaining said bearing on said shaft, said retainer positioned within said enlarged bore portion of said bearing;

a bearing at the other end of said shaft;

a power source electrically coupled with said motor;

an activation member electrically coupled with said motor and said power source for energizing and de-energizing said motor; and

an output coupled with said motor for driving a tool.

16. The power tool according to Claim 15, wherein a bearing housing surrounds said bearing, said housing fixed with said end plate.

17. The power tool according to Claim 16, wherein said bearing housing having a receiving bore for receiving said bearing, said receiving bore having a stepped configuration.

18. The power tool according to Claim 17, wherein said bearing has an outer surface with a step configuration for seating with said bearing housing.

19. The power tool according to Claim 15, wherein said bearing and said retainer being flush with said shaft end.

20. The power tool according to Claim 15, wherein a washer separates said bearing from said commutator.

21. The power tool according to Claim 15, wherein said enlarged bore portion defines an abutting shoulder, said retainer abutting said shoulder.